



(19)

Eur päisch s Patentamt

European Patent Office

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(11)

EP 0 861 820 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
21.10.1998 Bulletin 1998/43

(51) Int Cl. 6: C07C 51/46

(43) Date of publication A2:  
02.09.1998 Bulletin 1998/36

(21) Application number: 98301479.6

(22) Date of filing: 27.02.1998

(84) Designated Contracting States:  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC  
NL PT SE

Designated Extension States:  
AL LT LV MK RO SI

(30) Priority: 28.02.1997 JP 46147/97  
08.05.1997 JP 117347/97

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### (54) Method for recovering acrylic acid

(57) An improved method enabling stable and effective recovery of acrylic acid over a prolonged period comprises contacting an acrylic acid-containing gas obtainable by gas-phase catalytic oxidation of propylene and/or acrolein, with water, collecting the acrylic acid in the form of an aqueous solution, introducing the aqueous solution into an azeotropic separation column and distilling it in the presence of an azeotropic solvent to isolate and recover the acrylic acid, wherein the azeo-

topic solvent comprises either a mixed solvent composed of solvent A (ethyl acrylate, methyl methacrylate, vinyl acrylate, allyl acetate, isopropenyl acetate, vinyl propionate and methyl crotonate) and solvent B (toluene, heptane, 1-heptene, methylcyclohexane, cycloheptene, cycloheptadiene, cycloheptatriene, 2,4-dimethyl-1,3-pentadiene, methylcyclohexene and methylenecyclohexane) or the solvent A alone. In another embodiment, the azeotropic solvent comprises only solvent A.

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## EUROPEAN SEARCH REPORT

Application Number  
EP 98 30 1479

DOCUMENTS CONSIDERED TO BE RELEVANT									
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)						
X	GB 1 120 284 A (ASAHI KASEI KOGYO KABUSHIKI KAISHA) 17 July 1968 * page 2, line 73 - line 82; claim 1; examples 4,6 *	1-4	C07C51/46						
A	EP 0 551 111 A (NIPPON CATALYTIC CHEM IND) 14 July 1993	1-4							
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Y	US 3 432 401 A (TCHERKAWSKY CLAUDE) 11 March 1969 * column 2, line 35; claim 2 *	5-7							
Y	GB 1 290 725 A (ASAHI KASEI KOGYO KABUSHIKI KAISHA) 27 September 1972 * claim 1 *	5-7							
D,Y	& JP 46 034 691 B (...)	5-7							
A	GB 2 001 315 A (MITSUBISHI CHEM IND) 31 January 1979	5-7							
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)						
			C07C						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 34%;">Examiner</td> </tr> <tr> <td>MUNICH</td> <td>10 August 1998</td> <td>Janus, S</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	MUNICH	10 August 1998	Janus, S
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CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document							
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